

### Listing of Claims

1-38. (Cancelled)

39. (Currently Amended) An oligonucleotide probe comprising a sequence of at least ~~40~~ 12 contiguous nucleotides of a human mitochondrial genome, wherein the oligonucleotide probe comprises a  $\Delta$ C mutation at nucleotide ~~302~~ 303.

40. (Currently Amended) An oligonucleotide primer comprising a sequence of at least ~~40~~ 12 contiguous nucleotides of a human mitochondrial genome, wherein the oligonucleotide primer comprises a  $\Delta$ C mutation at nucleotide ~~302~~ 303.

41-117. (Cancelled)

118. (Cancelled)

119. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 14 contiguous nucleotides of a human mitochondrial genome.

120. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 16 contiguous nucleotides of a human mitochondrial genome.

121. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 18 contiguous nucleotides of a human mitochondrial genome.

122. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 20 contiguous nucleotides of a human mitochondrial genome.

123. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 22 contiguous nucleotides of a human mitochondrial genome.

124. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 24 contiguous nucleotides of a human mitochondrial genome.

125. (Previously Presented) The oligonucleotide probe of claim 39 or primer of claim 40 which comprises a sequence of at least 26 contiguous nucleotides of a human mitochondrial genome.

126. (Cancelled)